XX.—Synopsis of the Species of Cheradodis, a remarkable Genus of Mantodea common to India and Tropical America. By J. Wood-Mason, Officiating Superintendent Indian Museum, and Professor of Comparative Anatomy, Medical College, Calcutta*.

THE paper, of which the following is an abstract, will be published in full as soon as the illustrations (which have been drawn on the wood under my supervision and sent to London

to be cut) are returned to this country.

The remarkable distribution of this genus of Mantodea is exactly paralleled by that of another genus of Orthoptera, namely Mastax, species of which, from the southern slopes of the Peruvian Andes, have recently been described by Dr. S. H. Scudder.

The nearest allies of *Charadodis* are the Australian *Ortho*deras, which its young "larvæ" resemble in the form of the pronotum.

Genus Cheradodis, Serville.

A. Fore femora without a black blotch on the inner side.

1. Charadodis strumaria.

Chæradodis strumaria, Madame Mérian, Ins. de Surinam, 1726, tab. 27, ♀ et nympha; Roesel von Rosenhof, Der monatlich-herausgegebenen Insecten-Belustigung, 2ter Theil, 1749, Locust. tab. iii. fig. 1 et 2, ♀ et nympha (copied from Mérian).

Mantis strumaria, Linn. Syst. Nat. Ins. t. i. pt. ii. 1767, p. 691. no. 13, Q; Fabr. Ent. Syst. ii. 1793, p. 18. no. 21. ? Mantis cancellata, Fabr. loc. cit. 23; Stoll, Spectres et Mantes, pl. xi. fig. 42, Q; Lichtenstein, Trans. Linn. Soc. Lond. vol. vi. p. 25.

Chæradodis cancellata, Serville, Hist. nat. des Orthopt. 1839, p. 206, Q. Craurusa cancellata, Burmeister, Handb. d. Entom. 1839, Band ii. p. 542 (Syn. Serv. et Stoll, fig. 75, exclus.). Charadodis cancellata, Saussure, Mant. Améric. p. 19, & Q.

Hab. Cayenne (\(\mathhcap\), Serville), Surinam (\(\mathhcap\), Mérian, Stoll; 3 9, Saussure).

B. Fore femora with a black blotch on the inner side.

(a) The blotch on the lower half of the joint (American).

In the females of the following two species, the posterior angles of the pronotal expansions are broadly rounded, and are not produced backwards beyond the level of the hinder end of the primitive pronotum.

^{*} Communicated by the Author, having been read before the Asiatic Society of Bengal on June 2, 1880.

2. Charadodis rhombicollis.

Mantis rhombicollis, Latr. in Voy. de Humboldt, Zool. Ins. p. 103, pl. 39. figs. 2, 3, 3.

Chœradodis peruviana, Serville, Hist. Nat. des Orthopt. 1839, p. 207, ♂. Chœradodis strumaria, Stâl, Syst. Mant. 1877, p. 15, ♂♀.

The blotch commences, in both sexes, near the base of the femur, extends through the ungual groove nearly to the middle of the joint, and is there succeeded by a marginal row of black points in contact with the bases of alternate spines.

Hab. & \(\rangle \), Guayaquil, in the collection of the British Museum; nymph, Santa F\(\rangle \) de Bogot\(\alpha \), in the collection of the Indian Museum, Calcutta; New Granada (\(\rangle \) \(\rangle \), St\(\alpha l \).

3. Charadodis Servillei, n. sp.

Q. Closely allied to the preceding, from which it differs in having the marginal field of the tegmina proportionally narrower, and in the smaller size, as well as in the different shape, of the femoral blotch, which is small and oval, commences just beyond the ungual groove, and is followed by a marginal row of small black points.

Hab. 2 \, Cache, Costa Rica, in the collection of Messrs. Godman and Salvin; nymph, Chiriqui, in the collection of

the Indian Museum, Calcutta.

In the females of the next two species, and, in all probability, in that of *C. rhomboidea* also, the posterior angles of the pronotal lamellæ are rounded angulate and produced backwards, so that the hinder end of the primitive pronotum projects in the bottom of an angular emargination.

4. Chæradodis laticollis.

Chæradodis laticollis, Serville, Revue, p. 24; Hist. Nat. des Orthopt. 1839, p. 208, pl. iv. fig. 2, ♀; Saussure, Mantes Améric. p. 20,♀. Chæradodis strumaria, id. ib. p 18, ♂. Chæradodis laticollis, Stål, Syst. Mant. 1877, p. 17,♀.

The blotch is situated, in both sexes, just beyond the ungual groove, is oblong-rhomboidal in shape, and is followed by two black points on the bases of alternate spines; there is a fuscous speck at the end of the stigmatal spot of the tegmina; and the antero-lateral margins of the pronotal lamellæ are arcuate or convex, especially in the female.

Hab. 5 ♂, 5 ♀, Ecuador (Buckley), in the collection of the Indian Museum, Calcutta; Peru (♀, Stål); Cayenne

(♀, Serville et Stål); Surinam (♂, Saussure).

5. Chæradodis Stålii, n. sp.

Differs from the preceding in the shape of the blotch (which is pointed at both ends and commences in the ungual groove, and on either side of which the femur is pale luteous yellow instead of being clouded with fuscous), in being without a fuscous speck at the distal end of the stigma, in its shorter and differently shaped facial shield, and in having the anterolateral margins and the lateral angles of the pronotal expansions sinuous-concave and more broadly rounded off respectively.

Hab. $1 \, \mathcal{F}$, $4 \, \mathcal{F}$, Ecuador (Buckley), in the collection of the

Indian Museum, Calcutta.

6. Chæradodis rhomboidea.

Mantis rhomboidea, Stoll, Spectres et Mantes, pl. xi. fig. 45, &.

The male insect from Pará, in the British Museum, agrees neither with Saussure's description (loc. supra cit. p. 18) nor with any of the specimens in the Indian Museum; it more nearly approaches Stoll's figure, agreeing therewith in the points in which it differs from them.

The blotch commences in the ungual groove, thence extending as far along the femur as in the preceding four species; but it is not followed by a marginal row of black points. The pronotal lamellæ have no posterior angles.

Hab. &, Pará, in the collection of the British Museum. A nymph, from Ega, in the same collection, probably also belongs to this species.

This species is most nearly allied to Ch. laticollis.

(β) The blotch on the upper half of the joint (Indian).

7. Chæradodis squilla.

? Mantis cancellata, Fabr. Ent. Syst. ii. 1793, p. 18. Chæradodis squilla, Saussure, Mél. Orthopt. t. i. 3e fasc. p. 161, pl. iv. figs. 3, 3a, & et nympha; Lucas, Ann. Soc. Entom. Fr. 5e sér. t. ii. 1872, p. 32, \$\rightarrow\$.

Hab. India generally, from Ceylon (σ et nympha, Saussure; larva, in I. M. Calc.), Madras (φ , Lucas), Central India (in coll. Hop. Oxon.), to the banks of the Killing river, in the N. Khasi hills, on the north-east frontier (nymph, A. W. Chennell).

Obs. A specimen of this species in the British Museum

is erroneously marked "Brazil."